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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/250,400    02/16/99    YAMASHITA

M    35.C13319

005514  
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NEW YORK NY 10112

MMC2/0830

EXAMINER
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RAMSEY, K

ART UNIT	PAPER NUMBER
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2879

DATE MAILED:  
08/30/00

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

# Office Action Summary

Application No.  
**09/250,400**

Applicant(s)  
**Yamashita et al**

Examiner  
**Kenneth J. Ramsey**

Group Art Unit  
**2879**



☒ Responsive to communication(s) filed on 5/15/00 (IDS)

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claims

☒ Claim(s) 1-17 is/are pending in the application.

Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

☐ Claim(s) \_\_\_\_\_ is/are allowed.

☒ Claim(s) 1-17 is/are rejected.

☐ Claim(s) \_\_\_\_\_ is/are objected to.

☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☒ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been  
☒ received.

☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

☒ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

Art Unit: 2879

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claims 1-5 and 11-17 rejected under 35 U.S.C. 102(e) as being anticipated by Kawade et al, US patent 6,034,478. Column 11, line 32 through column 12, line 41 discloses energization forming in an atmosphere comprising a gas that promotes the cohesion of the electroconductive film while heating the film by resistance. The cohesion promoting gas atmosphere comprises H<sub>2</sub>, CO or methane. The electron-emitting devices so formed are provided as an electron source of an image forming device (figure 8). As to claims 11 and 12 a palladium oxide film is formed by the process disclosed at column 25, lines 1-8. Thus claims 1-5 and 11-17 are anticipated.

Claims 1-5 and 11-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Kawade et al, Japanese patent application no. Hei 09-298029. Paragraph [0086] through paragraph [0090] of Kawade et al discloses energization forming of a palladium oxide film in an atmosphere comprising a gas that promotes cohesion of the electroconductive film while heating the film by resistance. The cohesion promoting gas comprises H<sub>2</sub>, CO, or methane; see paragraph [0069]. The electron-emitting devices so formed are provided as an electron source of an image forming device (figure 12). Thus claims 1-5 and 11-15 are anticipated.

Art Unit: 2879

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawade et al, JP patent application no. Hei 09-298029 or US patent 6,034,478, in view of Talko et al EP patent 769,796. To form the palladium oxide film of Kawade et al by the ink jet droplet method of Talko et al, column 32, lines 30-41, would have been obvious to one of ordinary skill in the art since accurate placement of the film is possible.

Claims 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawade et al and Talko et al as applied to claim 9 above, and further in view of Ono et al, hei 08-31311. While Kawade et al relies upon resistance heating of the oxide film it is also obvious that the film should be heated between 20 and 400 degrees C since that is the temperature set forth in Ono et al paragraph [0066] for reducing oxide films in a reducing gas. Use of heating by maintaining the substrate at 50-100 degrees, claim 8, would have been obvious since this would stabilized the reduction process.

Any inquiry concerning this communication should be directed to Kenneth J. Ramsey, (703)308-2324 (voice), (703) 308-7382 (fax).

KJR  
August 25, 2000

  
Kenneth J. Ramsey  
Primary Examiner